DOCUMENT RESUME

ED 227 979 RC 013 934

AUTHOR	Faas, Ronald C.; And Others
TITLE	How Municipal Capital Projects Are Financed. Municipal Bonds Series.
INSTITUTION	Oregon State Univ., Corvallis. Cooperative Extension Service.; Western Rural Development Center, Corvallis, Oreg.
SPONS AGENCY	Department of Agriculture, Washington, D.C.
REPORT NO	WREP-61
PUB DATE	Jun 82
NOTE	12p.; For related documents, see RC 013 932-933.
AVAILABLE FROM	Western Rural Development Center, Oregon State University, Corvallis, OR 97331 ($.50).
PUB TYPE	Reports - Research/Technical (143) -- Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Capital; *City Government; Community Education; Community Leaders; *Financial Support; *Public Officials; Rural Areas; *Rural Development; Supplementary Reading Materials
IDENTIFIERS	Colorado; Montana; *Municipal Bonds; *Small Towns; Washington; Wyoming

ABSTRACT

Public officials in all towns and cities--especially those in smaller communities that participate less frequently in the bond market-- need information to assist them in answering questions concerning bond financing. One in a series developed by the Western Rural Development Center, this booklet introduces three general approaches to financing capital expenditures, discusses the extent of bond use by size of municipality, and reports recent findings on types of bonds used for particular purposes and the factors affecting choice of bond type of towns and cities in Colorado, Montana, Washington, and Wyoming during the period 1967-77. A glossary of specialized bond market terminology is included. (AH)

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MUNICIPAL BONDS
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How Municipal Capital Projects Are Financed

Ronald C. Faas, Douglas Young, and Philip Wandschneider

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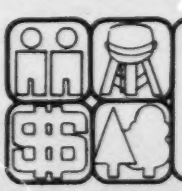

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Municipal officials and local citizens are occasionally called upon to make complicated decisions involving large sums of money to finance long-term capital facilities. When such financing is considered, both the officials and the general public must look closely at the consequences of their choices: What are alternative approaches to financing capital facilities? What are the advantages of each approach? Does the extent of bond financing vary by size of town? How do bonds differ, and which types are generally used for different purposes? Finally, what factors affect the choice between general obligation bonds and revenue bonds?

Public officials in all towns and cities—especially those in smaller communities that participate less frequently in the bond market—need information to assist them in answering questions such as these concerning bond financing. This publication introduces three general approaches to financing capital expenditures, discusses the extent of bond use by size of municipality, and reports recent findings on types of bonds used for particular purposes and the factors affecting choice of bond type by towns and cities in Colorado, Montana, Washington, and Wyoming during the period 1967-1977. The information is based on research conducted under the project "The Use and Financing of Bonded Indebtedness by Small Communities in Selected States," funded by the Western Rural Development Center.

This publication is addressed to local municipal officials and to those who advise them on public finance issues. It is intended as a report of original research findings, not as a "how-to" guide on the procedures of issuing bonds. Information on bond issuing procedures is available elsewhere in a number of publications. (See list of references. Specialists who would like more technical detail on the research underlying the information in this leaflet are referred to the parent report by Faas and Jones, 1981.)

To aid the reader, a glossary of specialized bond market terminology is included at the end of this leaflet.

Alternatives for Financing Capital Projects

Local government expenditures can be classified as operating or capital expenditures. An operating expenditure is a payment to acquire services, property, or an asset for use in the current year. Such annual recurring expenses include employee salaries, purchase of materials, and maintenance expenses.

A capital expenditure is made to purchase, construct, or replace a fixed asset, which is a nonrecurring project or facility expected to provide service for more than one year. Examples include land, buildings, streets, and utility systems.

A local government jurisdiction may consider three general approaches to financing capital expenditures: "pay as you acquire"[1] with current revenues or reserve funds; "pay as you use" through debt financing; or "get someone else to pay," by shifting responsibility to another party or jurisdiction (who is then, however, faced with the choice of "pay as you acquire" or "pay as you use").

The remainder of this section discusses various methods contained in these three alternatives and rationales for each. Since the debt financing approach may involve the use of municipal bonds, major types of bonds are also introduced.[2]

Pay-as-you-acquire

This approach finances capital projects by paying cash instead of borrowing against future revenues. Sources of cash include current revenues, accumulated reserve funds, and gifts or grants obtained outside the local jurisdiction's normal revenue sources.

Current revenues are collected from general taxation, fees, service charges, or special funds. The amount available to spend for capital projects is the difference between what is collected and what is required for operating expenses and prudent reserves.

Reserve funds for future expenditures can be built up by annual increments, or by setting aside unanticipated windfall income, until the balance is large enough to undertake the capital improvement. Sources of reserve funds include earmarked operational revenues, depreciation accounts, or proceeds from the sale of capital assets. Such reserve funds can earn interest.

Outside sources include private gifts from individuals, corporations, or foundations, and grants-in-aid from state or federal governments. When the use of outside gifts or grants is contemplated, it is important to keep local priorities in mind. Most aid programs require a local match of funds, and the financial condition of the municipality could be seriously impaired if too many lower priority projects are undertaken without adequate planning.

Pay-as-you-use

Capital projects can be financed by borrowing against future revenues with bonds, private or government loans, or other debt instruments. Two basic types of bonds are most frequently used by local governments.

General obligation bonds pledge the unlimited taxing power and the full faith and credit of the issuing government to meet the required principal and interest payments. The total amount of general obligation bonds a local government may issue is normally limited by state law, and voter approval is required in many instances. Some states allow municipalities to borrow up to a specified limit without voter approval, but require approval by voter referendum for general obligation bonds issued above that limit.

Limited liability or *revenue bonds* are those to which the income from some specific enterprise is

[1] The "pay-as-you-acquire" method (Center for Capital Market Research, 1978) of financing capital projects means paying cash rather than borrowing. It is referred to as the "pay-as-you-go" method in some references. However, we feel the terms "pay-as-you-acquire" and "pay-as-you-use" provide a clearer distinction between paying cash and repaying debt.

[2] Unless noted otherwise, definitions in this section are from *A Capital Improvement Programming Handbook*, Municipal Finance Officers Association, Chicago, 1978, pp. 21-23.

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pledged, but are not backed by the unlimited taxing power and the full faith and credit of the local government.[3] Such bonds might be used, for example, to finance the extension of municipal water lines to newly annexed areas of a town or city. Charges made to the recipients of the service are then committed to repayment of the borrowed money. Revenue bonds are not considered part of the municipal debt restricted by legal limitations, and may usually be issued by the local governing body without prior approval by a voter referendum.

Private notes or *government loans* are alternatives to bond financing within the pay-as-you-go approach. These include short-term notes issued by local banks or statewide banking establishments, and low-interest loans from state and federal agencies.

Another type of debt instrument is the *lease-purchase arrangement.* Local governments utilizing the lease-purchase method prepare specifications for a needed public works project and have it constructed by a private company or authority. The facility then is leased by the municipality at an annual or monthly rental. At the end of the lease period, the title to the facility can be conveyed to the municipality without any further payments. The rental over the years will have paid the total original cost plus interest. Although localities in some states have used this method to avoid the necessity of calling bond elections or to avoid debt limits, this type of financing has sometimes proved to be excessively costly. Furthermore, its legality has been questioned in some states, while in other states the obligation is considered as part of the municipal debt. This method has been used successfully in the purchase of parklands (Denver Regional Council of Governments, 1975).

Get-someone-else-to-pay

A third approach is for the local officials to shift responsibility for the improvement project to other parties within the jurisdiction or to some other jurisdiction. It should be emphasized that wherever the responsibility is shifted, within or outside the jurisdiction, "someone else" is ultimately limited to the two basic financing alternatives introduced above, either pay-as-you-acquire or pay-as-you-use.

Within the jurisdiction

Responsibility may be shifted to specific parties within the jurisdiction through use of special assessments, tax increment financing, or exactions that require a developer to provide specified improvements before a subdivision is accepted by the local government.

Special assessment bonds are sometimes used to finance the construction of streets, sewer lines, storm drains, or other improvements that affect the value of adjacent property. Special assessments are levied against the owners of the property and the income is pledged to repay the bonds. Such bonds usually carry a higher rate of interest than general obligation bonds, but have the advantage of not being charged against the municipal debt limit.

[3] There are six types of limited liability bonds, including enterprise revenue bonds, lease-rented bonds, industrial and pollution control revenue bonds, special revenue bonds, lease-purchase bonds, and tax increment bonds.

Tax increment financing is used in some states, where certain areas may be designated as tax incremental financing areas for redevelopment. In this form of financing, all taxes generated by new developments are used to retire tax incremental bonds issued by the municipality for acquisition, relocation, demolition, administration, and site improvements.

Exactions are a collection of related techniques designed to decrease growth or the impact of growth by making new development pay part of the costs the development imposes on the community. These include connection fees or systems development charges, mandatory construction of required improvements, dedication of land, or payment of money in lieu of such construction or dedication (Roberts and Pease, 1979).

Another jurisdiction

Responsibility for a project is sometimes shifted to another jurisdiction, such as a special district or authority, which is created in most cases to manage facilities that are supported by user charges. Examples include water, sewage, and electrical utilities.

Special districts with the power to tax are also created for the purpose of issuing bonds and constructing facilities that may not be self-supporting, such as cemetery, fire, or hospital districts. Sometimes such districts are established to avoid restrictive debt limits.

The *authority* device may offer a convenient method of financing interjurisdictional facilities. However its use also creates problems, including the scattering of governmental responsibility. The debt incurred by an authority or special district is still a part of the community's total financial obligation even when it is not counted in the debt limit of the general purpose local government (Denver Regional Council of Governments, 1975).

Joint financing is a method to shift part of the cost of a facility to another jurisdiction. An increasing number of cities and counties are finding that both jurisdictions may benefit from joint development of a project. Construction of city-county office buildings, development of joint sanitary landfill sites, and shared funding for ambulance and fire-fighting equipment in exchange for service to rural areas are examples.

Comparisons of pay-as-you-acquire and pay-as-you-use financing

Pay-as-you-acquire

This approach works well where capital needs are steady and modest, and financial capability is adequate. There are several advantages, according to the Municipal Finance Officers Association (1978a):

- It saves interest cost. Interest on long-term bonds can more or less equal the original capital cost, depending on interest rates and repayment schedules. Thus, one can pay twice (or more) for a capital improvement even though the annual bill over an extended period is disarmingly low.
- Pay-as-you-acquire protects borrowing capacity for unforeseen major outlays that are beyond any one year's capability.
- When combined with regular, steady completion of capital improvements, and good documentation and publicity, pay-as-you-acquire fosters favorable bond ratings when long-term financing is undertaken.

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- Finally, the technique avoids the inconvenience and considerable costs associated with marketing of bond issues, such as advisers, counsel, and printing.

Pay-as-you-use

The local government may not be able to defer the capital project until enough cash has been accumlated to "pay-as-you acquire." The pay-as-you-use approach allows a local government to pay the cost of the capital project as the facilities are used, which has several advantages:

- Extended financing avoids awkward, fluctuating expenditure cycles caused by pay-as-you-acquire financing when capital projects are rarely undertaken.
- One view holds that a long-life asset should be paid for by its users throughout its normal life, rather than all at once by those who may not have the use of it for the full term. The higher cost due to interest may be offset, in a growing or stable population, by spreading it over a larger number of users/payers over a period of time. This approach allows costs to be synchronized with benefits. The advantage would be lost, however, with a declining population, such as in a boom-and-bust situation.
- If tax rates have to be increased to pay for a series of capital improvements in a short period of time, it would not be fair to people who leave after a brief residence. Pay-as-you-acquire would constitute a subsidy for those who came after the capital improvement was completed and paid for.
- When inflation is driving up construction costs, it may be cheaper to borrow and pay today's price rather than wait and pay tomorrow's price (Municipal Finance Officers Association, 1978a; and Center for Capital Market Research, 1978).

Trends and Practices

The remainder of this publication addresses municipal bond financing within the pay-as-you-use approach, as followed in recent years by cities in Washington, Colorado, Montana, and Wyoming.

Extent of bond use by size of municipality

Does the size of the municipality affect the volume of bonds issued, participation in the bond market, and utilization of bonded indebtedness capacity?

Volume of bonds issued

The total volume of bonds issued by cities and towns is expected to be a function of population size. As population increases, expanded or upgraded capital facilities are often needed.

Figure 1 shows the total volume of bonds issued each year by municipalities in each of the four states during 1967-1977. Cities and towns in the two states with the largest total populations in 1977 issued the largest average bond volumes: Washington with 3.7 million population and $89 million average bond volume, and Colorado with 2.6 million population and $86 million. The two less-populated states—Montana with 800,000 population, and Wyoming, 400,000— issued $7 million and $10 million average volume, respectively (Faas and Jones, 1981).

Furthermore, the dollar volumes of bonds issued since 1970 by the municipalities in the two larger states reflected their respective total population increases from 1970 to 1977. Colorado gained about 355,000 people and Washington had a 250,000 increase, compared with the smaller growth in Wyoming (65,000) and Montana (63,000).

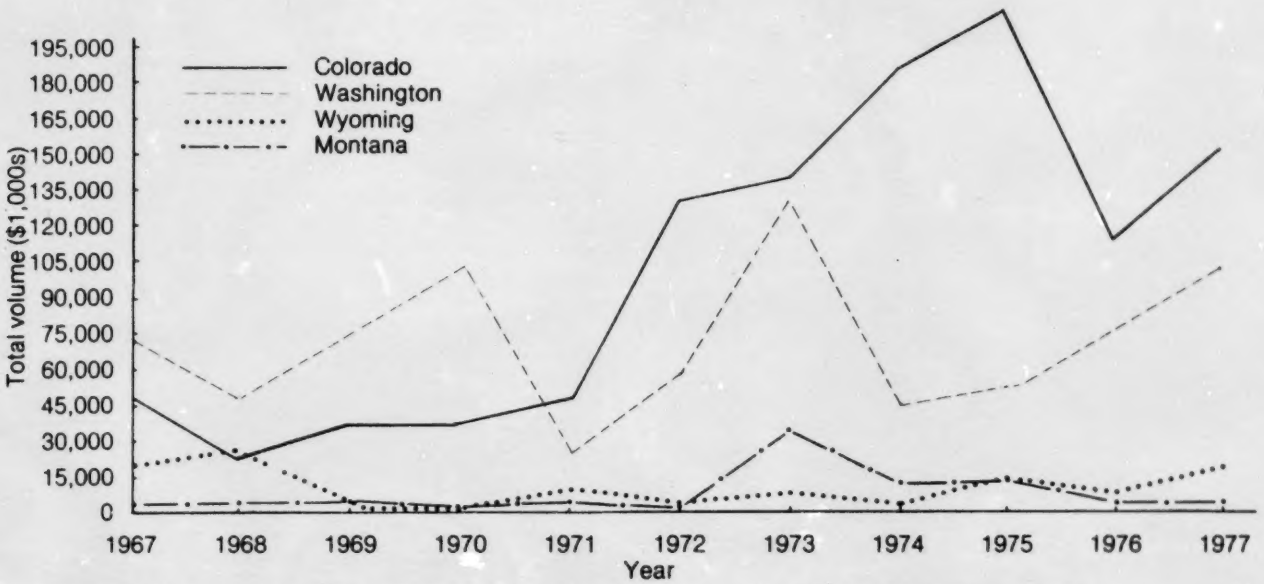

Figure 1—Total volume of all types of bonds issued by municipalities in four western states, 1967-1977 (Faas and Jones, 1981).

Table 1. 1967-77 bond market participation by Washington municipalities, by size of city or town

Population Size Group	Total No. of Cities & Towns[a]	Cities and Towns Issuing Bonds[b]		Number of Years Bonds Issued During 1967-77 Study Period[b]			
		No.	Percent of Size Group	1	2-3	4-5	6-11
Under 2,500	172	31	18	28	3	----	----
2,500-9,999	56	29	52	17	10	2	----
10,000-49,999	31	30	97	3	7	16	4
Over 50,000	6	6	100	----	----	----	6
TOTAL	265	96	36	48	20	18	10

[a] Cities and towns were grouped by population size on the basis of their 1977 populations. The total number in each size group was determined from "1977 Municipal Population by Rank," pp. 60-64 in *Officials of Washington Cities, 1978-79.*

[b] Compiled from Public Securities Association, "Long-Term Municipal Bond File" (computer tape), 1 World Trade Center, Suite 5271, New York, New York.

Bond market participation

Beyond larger volumes, do larger population centers participate more frequently in the bond market? Several studies compared bond market activity by size of municipality in Washington.

Only 96 of Washington's 265 cities and towns issued any bonds—general obligation or revenue—during the 11-year study period (Faas and Jones, 1981). As shown by Table 1, these issuers included all 6 cities over 50,000 population, and 30 of the 31 municipalities in the 10,000-49,999 population range. In contrast, bond sales were reported for about half of the 56 cities and towns with populations from 2,500 to 9,999, and for only 18 percent of the 172 towns with less than 2,500 population.[4]

Table 1 suggests that frequency of participation in the bond market also increased with the size of the municipality. Of the 31 towns under 2,500 population issuing bonds, 28 did so in only 1 of the 11 years studied. Similarly, 27 of the 29 cities and towns in the 2,500-9,999 population range issued bonds in 3 or fewer years during the period studied. Larger cities issued bonds more often, however. Twenty of the 30 cities with 10,000-49,999 population issued bonds in 4 or more of the 11 years, and all 6 of the largest cities issued bonds in 6 or more of the 11 years studied.

Larger municipalities also issued more bonds per municipality than did smaller towns during the study period. Sher (1979) examined all general obligation bonds issued by Washington cities and towns during 1967-1977. As shown in Table 2, the 6 largest cities (over 50,000 population) averaged 4.7 bonds each, and those in the 10,000-49,999 range averaged 2.6 bonds each. Cities and towns in the 1,000-4,999 and 5,000-9,999 size groups each averaged about 1 bond per municipality, and the smallest towns (under 1,000 population) averaged less than 1 bond for every three towns during the 11-year period.

Similarly, smaller towns tended to place a bond issue before the voters less frequently than did the larger towns. Kliem (1980) found that only 45 percent of the 78 Washington towns responding to his 1979 survey of mayors had attempted a general obligation bond referendum during the previous 5 years. While less than one-fourth of the 29 towns under 1,000 population had attempted a general obligation bond issue, over half of the 38 municipalities in the 1,000-4,999 group

Table 2. Number of general obligation bonds issued, 1967-1977, and number of Washington cities and towns by population size

Population Size Group	Number of Bonds Issued[a]	Number of Cities and Towns[b]	Average Number of Bonds Issued
Under 1,000	33	109	0.3
1,000-4,999	93	102	0.9
5,000-9,999	19	17	1.1
10,000-49,999	81	31	2.6
Over 50,000	28	6	4.7
TOTAL	254	265	

[a] Sher, 1979.

[b] Cities and towns were grouped by population size on the basis of their 1977 populations (*Officials in Washington cities, 1978-79,* 1978).

[4] The data set analyzed by Jones included all bond issues listed in the Public Securities Association Long-Term Municipal Bond File, which had originally been recorded from issues appearing in *The Daily Bond Buyer,* a financial market periodical. Although this data source is widely regarded as comprehensive by industry sources, a comparison of this data with independent primary research by Sher revealed that *The Daily Bond Buyer* or the Long-Term Municipal Bond File failed to list many small bonds under $100,000 in size issued by Washington municipalities. The data source was essentially complete for issues larger than $500,000, however. These limitations of the data set employed by Jones should be considered in interpreting the results reported by Faas and Jones (1981).

and nearly two-thirds of the 11 cities and towns in the 5,000-9,999 range had placed a general obligation bond issue before the voters.

One implication of the above findings is that officials and staff of smaller municipalities who participate less frequently in the market may be less experienced in dealing with bond buyers. This is supported by a recent survey of Washington mayors (Wandschneider, et al., 1982).

Bonded indebtedness capacity

The utilization of bonded indebtedness capacity did not appear to decrease with decreasing size of municipality, however. Table 3 presents comprehensive data prepared by the office of the Washington State Auditor suggesting that the 37 largest cities and towns in Washington had used less of their bonded indebtedness capacity in 1975, as authorized by state law, than did a sample of 16 eastern Washington small towns studied by Rozell (1977).

While 12.5 percent of the towns under 2,500 population used 30 percent or more of their bonded indebtedness capacity, none of the 37 largest cities and towns, with 10,000 or more population, used over 20 percent. Only 75 percent of the 16 towns under 2,500 population used 10 percent or less of their bonded indebtedness capacity, compared with 88 percent of the 17 municipalities with populations of 10,000-19,999, and 80 percent of the 20 cities over 20,000 population. Small towns in Washington do not appear to be any more apprehensive in using general obligation bonds to raise long-term financing for capital facilities than are the 37 largest cities in the state.

Table 3. Washington city and town utilization of general obligation bonded indebtedness capacity by size of municipality, 1975

Population Size Group	Number Municipalities in Group	Use of Bonded Indebtedness as Percentage of Maximum Indebtedness Authorized by State Law[a]: 0-10 Percent No. of Munic.	0-10 Percent % of Group	11-20 Percent No. of Munic.	11-20 Percent % of Group	More Than 30% No. of Munic.	More Than 30% % of Group	Not Reporting No.	Not Reporting %
Over 20,000[b]	20	16	80	3	15			1	5
10,000-19,999[b]	17	15	88	1	6			1	6
Under 2,500[c]	16	12	75	2	12.5	2	12.5		

[a] The Washington State general obligation debt limitations for cities and towns total 7.5 percent of full assessed valuation, consisting of general purpose—2.5 percent, utilities—2.5 percent, and open spaces and parks—2.5 percent.

[b] Compiled from "Extent of Indebtedness—Category I Cities," in *Local Government Comparative Statistics, 1975.*

[c] Rozell, 1977.

Types of bonds for particular uses

Municipalities in the four states sold $2.3 billion total volume of bonds during the 11-year period studied by Jones. General obligation bonds comprised nearly 44 percent of this volume, and 47 percent were utility and quasi-utility revenue bonds. The remainder were other kinds of revenue bonds, including lessee revenue bonds (8 percent) and miscellaneous-severance tax revenue bonds (1 percent).

Table 4 shows that water, sewer, and other utilities were the most popular use of bond financing and accounted for nearly 40 percent of the volume, as might be expected given the cost of such projects.

Table 4. Bond financing by type of bond and use of proceeds for municipalities in four western states, 1967-77

Use of Proceeds	TYPE OF BOND: General Obligation Volume ($1,000)	Revenue Volume ($1,000)	Total Volume ($1,000)	Percent
Water, sewer and other utilities	318,252	570,754	889,006	38.7
Refinancing	266,892	258,546	525,438	22.8
Ports, airports and transportation	57,508	355,430	412,938	17.9
Recreation and parks	53,240	16,955	70,195	3.5
Public housing and/or hospitals	27,000	18,740	45,740	2.0
Streets and roads[a]	31,964	----	31,964	1.4
Municipal administration	12,478	----	12,478	0.6
Public safety	12,862	----	12,862	0.6
Cultural or community education	11,630	320	11,950	0.5
Classified or unknown uses	218,286	71,941	290,227	12.6
Total ($1,000s)	1,010,112	1,292,686	2,302,798	
(Percent)	43.9	56.1		100.0

[a] Figures for streets and roads do not include special assessment bonds issued for local improvement districts.

SOURCE: Faas and Jones, 1981.

Utility revenue bonds provided more than three-fifths of the financing of utility projects.

About 23 percent of total volume was used for refinancing, with nearly equal volumes from general obligation and revenue bonds.

Ports, airports, industrial development, and other transportation uses accounted for nearly 13 percent of the total municipal bond volume. More than one-half of this volume (56 percent) was raised through quasi-utility and utility revenue bonds, and nearly 30 percent with lessee revenue bonds.

Recreation and parks accounted for only 3.5 percent of total municipal bond volume, of which over three-fourths was raised through general obligation bonds. Public housing and/or hospitals represented 2 percent of the total volume, with nearly three-fifths of this use coming from general obligation bonds.

Streets and roads, public safety, municipal administration, and cultural and community education each accounted for about 1 percent of the total volume of bonds reported issued by municipalities. These four uses were financed almost entirely by the sale of general obligation bonds.

Comparison of general obligation and revenue bonds

Revenue bond interest rates are almost always higher than general obligation interest rates because they are not backed by the full faith and credit of the local jurisdiction.

Economic theory suggests that, all other things being equal, as general obligation bond interest rates decrease relative to revenue bond interest rates, the use of general obligation bonds increases as a percentage of total bond volume. Analysis of bond market performance data in the four states over the 11-year period, however, found no evidence that bond issuers chose between general obligation and revenue bond issues on the basis of interest cost (Faas and Jones, 1981).

A rival hypothesis is that other institutional factors are given more weight. For purposes for which revenue bonds can be used, revenue bonds offer several advantages over general obligation bonds:

- Governing body approval for revenue bonds is usually easier to obtain than is voter approval of a referendum for general obligation bonds.
- The facility financed by revenue bonds is paid for by users of the facility rather than by taxpayers in general.
- Some needed improvements may be undertaken by revenue bond financing, even if the locality is up to its legal debt or taxing limit for general obligation bonds and ad valorem taxes.

Beyond higher interest rates, there also are disadvantages in using revenue bonds rather than general obligation bonds:

- Revenues for the facility are not realized until the facility is in operation.
- The debt incurred by revenue bonds, as a practical matter, still must be counted as an obligation of the local taxpayers when analyzing community financial obligations.

Historical trends by bond type

As noted earlier, the dollar volume of revenue bonds exceeded the volume of general obligation bonds in the four states. Likewise, the average size and maximum size of revenue bonds were larger than for general obligation bonds in each of the four states (Table 5). However, only in Washington did the average number of revenue bonds issued per year exceed that for general obligation bonds (Figure 2). Washington municipalities appear to have utilized more revenue bond volume to accommodate its 1970-1977 population growth, while Colorado muncipalities issued more general obligation bond volume during the same period of population growth (Figure 3).

Table 5. Comparison of the average size, average number, and range in size of general obligation and revenue bonds for cities and towns in four western states, 1967-1977

	STATES			
	Colorado	Montana	Washington	Wyoming
Average Size ($)				
G.O.	4,064,283	330,566	2,033,208	1,177,545
Revenue	4,290,506	2,262,000	4,819,713	5,893,843
Average Number of Issues/Year				
G.O.	13.18	2.72	11.36	3.0
Revenue	7.55	2.72	13.64	1.18
Range in Size ($1,000s)				
G.O.	50-28,550	18-1,969	15-41,535	18-8,900
Revenue	33-47,415	20-18,000	50-112,380	155-25,000

SOURCE: Faas and Jones, 1981.

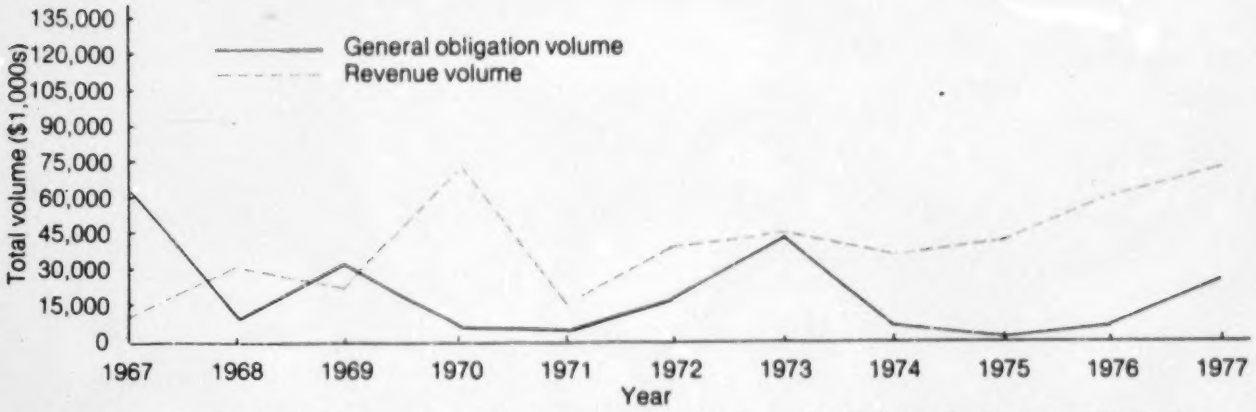

Figure 2—Comparison of total volume of general obligation bonds and all revenue bonds issued by Washington municipalities, 1967-1977 (Faas and Jones, 1981).

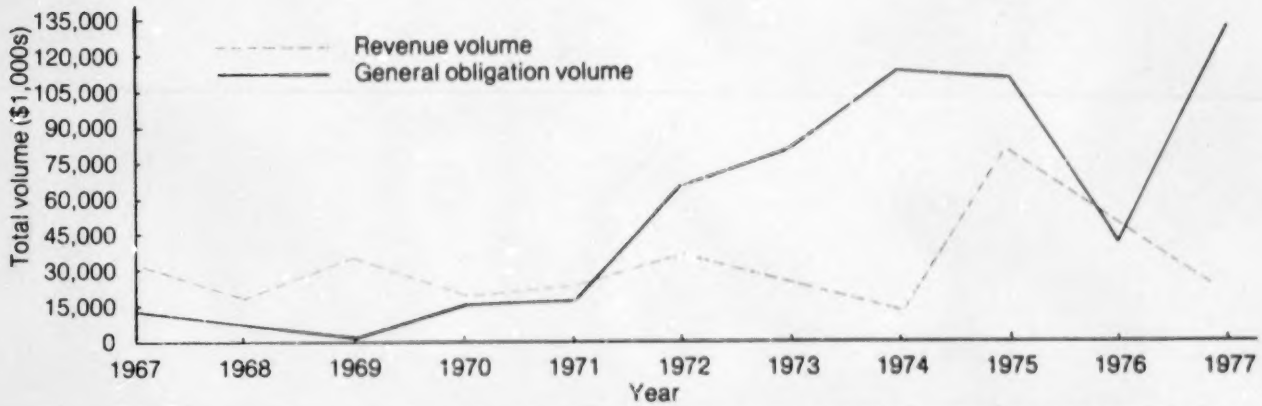

Figure 3—Comparison of total volume of general obligation bonds and all revenue bonds issued by Colorado municipalities, 1967-1977 (Faas and Jones, 1981).

Summary

This publication defines operating and capital expenditures, and outlines three approaches to financing capital projects. The two basic types of bonds most frequently used by local governments in the pay-as-you-go approach are general obligation bonds and revenue bonds.

A profile of bond practices and trends in four western states during the period 1967-1977 is also presented. Municipalities in Washington and Colorado—states with five times the combined population of the states of Montana and Wyoming—issued ten times the dollar volume of bonds as did municipalities in the latter two states. Three studies found that participation in the bond market increased with size of Washington cities. Indicators of participation included number of years in the market, number of general obligation bonds issued, and frequency in placing a bond issue before the voters. Based on use of bonded indebtedness capacity in 1975, however, small towns in Washington do not appear to be any more apprehensive in using general obligation bonds than are the 37 largest cities in the state.

Revenue bonds provided 56 percent of the $2.3 billion total volume of bonds sold by municipalities in the four states during the 1966-1977 study period. Water, sewer, and other utilities accounted for nearly 40 percent of all the municipal bond volume. Analysis of bond market performance data found no evidence that bond issuers chose between general obligation and revenue bond issues on the basis of interest cost.

Glossary

Bond: A written promise to pay a specified sum of money (called the face value or principal amount) at a specific date or dates in the future (called the maturity date or dates) together with periodic interest at a specified rate. The difference between a note and a bond is that the latter runs for a longer period of time and requires greater legal formality.

Debt Limit: The maximum amount of debt that a governmental unit may incur under constitutional, statutory, or charter requirements. The limitation is usually some percentage of taxable valuation and may be fixed upon either gross or net debt. The legal provision in the latter case usually specifies what deductions from gross funded debt are allowed to calculate net debt.

Full Faith and Credit: A pledge of the general taxing power of a government to repay debt obligations (typically used in reference to bonds).

General Obligation Bond: A bond for which the full faith and credit of the issuer has been pledged for payment. A *limited general obligation bond* is a general obligation bond that may be issued by an elected governing body without voter approval. It is sometimes referred to as a councilmatic bond, because in Washington State limited general obligation bonds can be issued by a majority vote of the town council.

Revenue Bonds: Bonds issued to provide the capital for financing revenue-producing assets or activities. Revenue bond interest and amortization is normally paid from the revenues generated by the enterprise. Debt service is not guaranteed by the full faith and credit of the municipality; therefore, if there is a default, the issuer is under no obligation to make payments from general revenues.

Special Assessment Bonds: Bonds payable from the proceeds of special assessments against benefited property. These include *local improvement bonds*, which are used to finance expenditures of a local improvement district whose boundaries are generally different from those of the municipality. These bonds constitute only a lien on the specific pieces of property and are not a general obligation of the entire taxing district.

Sources for the glossary are Municipal Finance Officers Association, 1978b; Lubov, 1979; and Sher, 1979.

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Prepared by Ronald C. Faas, Extension economist, and Douglas Young and Philip Wandschneider, Department of Agricultural Economics, all of Washington State University. This publication is part of the Municipal Bonds series produced by the Western Rural Development Center. Other titles in the series include:

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June 1982

WREP 61

A Western Regional Extension Publication

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